SOURCES OF DATA ON FAMILY INCOME AND ADJUSTMENTS TO THE DATA

Distributions of family income for 1977 and 1984, and the projected distribution in 1988, are based on data from three sources. The primary source is the March Current Population Survey (CPS) for 1978 and 1985. The CPS is a monthly survey of approximately 60,000 families, conducted by the Bureau of the Census. Each March, the survey collects detailed information on family characteristics and family income in the previous calendar year. The reported data on income from taxable sources from the CPS files were adjusted for consistency with reported income from Statistics of Income (SOI) samples for calendar years 1977 and 1984. The SOI is an extensive annual sample of actual individual income tax returns. Data on consumer expenditures were taken from the 1980 and 1984 Consumer Expenditure Survey (CES) Interview Surveys. The CES Interview Survey is a quarterly panel survey conducted by the Bureau of Labor Statistics. The survey collects detailed data on household expenditures over a 12-month period. The 1980 CES data were adjusted to 1977 levels by changes in per capita expenditures of certain types as reported in the National Income and Product Accounts.

Each of the 1984 files was aged to 1988 using actual growth rates in population, income, and expenditures through 1986, and projected growth rates for 1987 and 1988.

For purposes of comparing the distribution of family incomes in those years, income was divided into four categories: labor income (wages, salaries, and income from self-employment), capital income (rents, interest, dividends, and capital gains), transfer income (Social Security, unemployment insurance, AFDC, SSI, workers compensation, and veterans' benefits), and other income (alimony, child support, and private pension payments).

Many people incur "paper losses" for tax purposes. In order to better approximate the economic income of families, rental losses and most partnership losses were not subtracted from family income. All losses of sole proprietorships were allowed.

Reported pretax family incomes were adjusted to include the amount of the employer share of the Social Security payroll tax, the unemployment insurance payroll tax, and the corporate income tax. The employer share of the Social Security payroll tax, and the unemployment insurance payroll tax, were allocated to the employee on whose behalf the taxes were paid.

The corporate income tax was assigned to incomes in two ways, consistent with the tax incidence assumptions given at the end of Chapter III. In the first alternative, all wages were increased by the ratio of corporate income taxes to total wages. In the second alternative, capital income (consisting of positive rents, interest, dividends, and an adjusted amount of realized capital gains) was increased by the ratio of corporate taxes to the sum of capital income. a/

a. Total adjusted capital gains in a particular year are computed as a fixed percentage of national income. Each family's share of adjusted gains is assumed to be the same as its share of realized gains. This procedure prevents assignment of a disproportionate share of the corporate tax to capital gains in those years when realizations are especially high.

share--under the allocation of the corporate tax to capital income and by 12 percent--from a 30.6 percent share to a 34.4 percent share--under the allocation of the tax to labor income. The share of income for the top 1 percent of families increased by two to three percentage points, depending upon the allocation of the corporate tax. Tables contained in Appendix A show the distribution of separate components of income by family income decile. The results shown in those tables indicate that the increase in the top decile's share of income between 1977 and 1984 resulted from an increase in its share of all types of income.

The distribution of family income in 1988 is expected to look much the same as in 1984. The top decile's share of income, however, is expected to increase further.

TABLE 5. DISTRIBUTION OF TOTAL FAMILY INCOME BY POPULATION DECILE (In percent)

	1977 Corporate Tax Allocated to		1984 Corporate Tax Allocated to		1988 Corporate Tax Allocated to	
Decile a/	Capital Income	Labor Income	Capital Income	Labor Income	Capital Income	Labor Income
First b/	1.1	1.1	0.9	0.9	0.9	0.9
Second	2.5	2.5	2.3	2.3	2.2	2.2
Third	3.9	3.9	3.6	3.6	3.6	3.6
Fourth	5.4	5.5	5.0	5.0	5.0	5.0
Fifth	7.1	7.1	6.5	6.6	6.5	6.5
Sixth	8.7	8.9	8.2	8.3	8.1	8.2
Seventh	10.6	10.9	10.1	10.2	10.0	10.2
Eighth	12.9	13.2	12.6	12.8	12.5	12.7
Ninth	16.2	16.6	16.3	16.4	16.1	16.4
Tenth	31.9	30.6	35.0	34.4	35.7	34.9
Top 5 percent	21.5	20.1	24.3	23.7	25.1	24.2
Top 1 percent	9.2	8.1	11.8	11.2	12.5	11.8
All Deciles c/	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE; Congressional Budget Office tax simulation models.

a. Ranked by size of family income.

b. Excludes families with zero or negative incomes.

c. Includes families with zero or negative incomes not shown separately.

Table 6 shows average family income for each family income decile and for the top 5 percent and 1 percent of families in 1977, 1984, and 1988. Average incomes are shown in nominal and 1987 dollars for both corporate tax allocations. A comparison of average incomes in 1987 dollars shows that, despite an increase in the overall average, incomes in all but the top decile declined in real terms between 1977 and 1984. These decreases were offset by particularly large increases in the average income of families in the top 1 percent of the income distribution. While average real incomes are projected to increase in all income deciles between 1984 and 1988, the largest percentage increase by far will occur for families in the top of the income distribution.

TABLE 6. AVERAGE FAMILY INCOME IN EACH POPULATION DECILE, BY YEAR AND TREATMENT OF CORPORATE TAX

	1977 Corporate Tax Allocated to		1984 Corporate Tax Allocated to		1988 Corporate Tax Allocated to	
Decile a/	Capital Income	Labor Income	Capital Income	Labor Income	Capital Income	Labor Income
			In Nominal Dollars			
First b/	2,191	2,189	3,096	3,102	3,676	3,685
Second	4,438	4,435	6,756	6,769	8,043	8,064
Third	6,974	6,992	10,768	10,820	12,874	12,964
Fourth	9,722	9,810	15,044	15,130	17,967	18,108
Fifth	12,562	12,715	19,600	19,737	23,324	23,544
Sixth	15,590	15,869	24,685	24,906	29,333	29,660
Seventh	18,892	19,371	30,461	30,756	36,174	36,625
Eighth	22,960	23,575	37,938	38,403	45,045	45,752
Ninth	28,869	29,525	48,833	49,399	58,103	58,957
Tenth	56,917	54,659	105,114	103,293	128,631	125,808
Top 5 percent	76,571	71,591	146,129	141,954	180,842	174,582
Top 1 percent	163,448	143,696	352,601	335,392	452,024	425,440
All Deciles c/	17,840	17,840	30,022	30,022	36,043	36,042
			In 1987 Dollars			
First b/	4,118	4,113	3,395	3,401	3,496	3,504
Second	8,340	8,334	7,407	7,422	7,648	7,669
Third	13,106	13,140	11,807	11,863	12,242	12,327
Fourth	18,271	18,436	16,495	16,589	17,085	17,220
Fifth	23,609	23,896	21,490	21,640	22,179	22,389
Sixth	29,299	29,824	27,066	27,308	27,894	28,205
Seventh	35,505	36,405	33,399	33,721	34,399	34,828
Eighth	43,149	44,305	41,596	42,106	42,834	43,507
Ninth	54,254	55,487	53,542	54,163	55,252	56,064
Tenth	106,966	102,722	115,251	113,254	122,320	119,635
Top 5 percent	143,904	134,543	160,221	155,643	171,969	166,016
Top 1 percent	307,174	270,053	386,603	367,734	429,845	404,566
All Deciles c/	33,527	33,527	32,917	32,917	34,274	34,274

SOURCE; Congressional Budget Office tax simulation models.

a. Ranked by size of family income.

b. Excludes families with zero or negative incomes.

c. Includes families with zero or negative incomes not shown separately.

CHAPTER V

THE DISTRIBUTION OF FEDERAL TAXES IN 1977, 1984, AND 1988

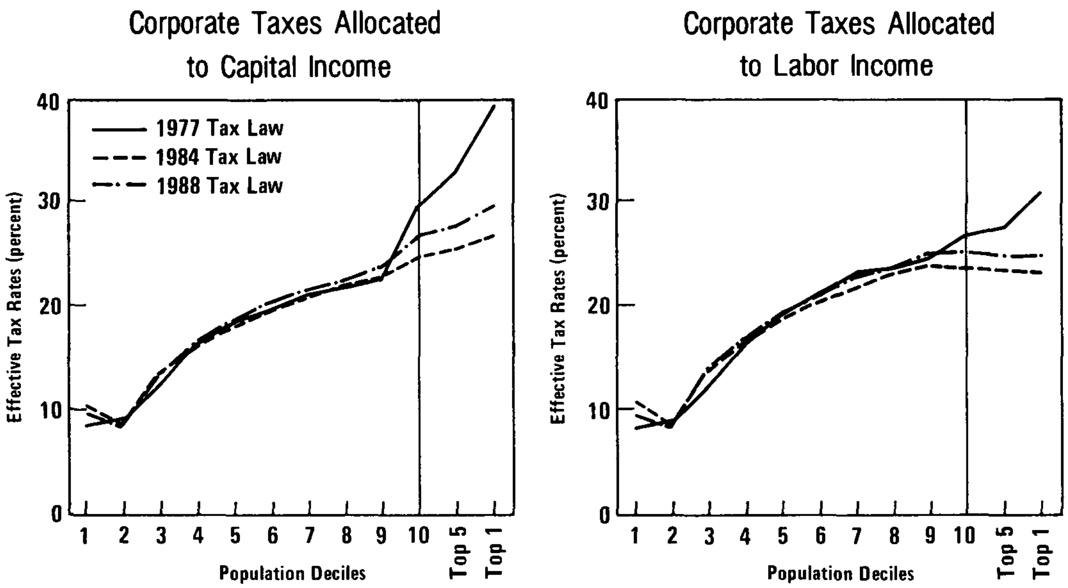
This chapter presents estimates of effective tax rates by family income classes in 1977, 1984, and 1988.1/ Between 1977 and 1984 the distribution of total federal taxes became less progressive by this measure. This change reflects primarily a shift in the tax burden at either end of the income distribution. Effective tax rates rose for families in the lowest-income decile and fell for families in the highest. Between 1984 and 1988 the distribution of taxes is projected to become more progressive but to remain less progressive than in 1977. Results are shown for each of the two different assumptions concerning the allocation of the corporate tax. Appendix B contains tables for two additional distributional measures--the share of total taxes paid by each income group and the distribution of tax payments by type of tax within each decile.

COMPARISONS OF FEDERAL TAXES OVER YEARS

Figure 5 compares total effective tax rates in 1977, 1984, and 1988 under the two alternative assumptions about the allocation of the corporate income tax. Under either allocation, Figure 5 indicates a decrease in the progressivity of total federal taxes between 1977 and 1984, and a small increase in progressivity between 1984 and

1. For all tax sources, federal taxes were estimated as calendar year liabilities (some of which may not be paid to the government until the following year). Individual income taxes, payroll taxes, and excise taxes were allocated to each family using CBO tax simulation models. Because the individual income tax includes the refundable portion of the earned income credit, tax liabilities can be less than zero. (The refundable portion of the earned income credit technically is an outlay rather than an offset to revenues, but the credit is administered by the Internal Revenue Service as part of the tax system.) Payroll taxes include the employee and employer shares of the Social Security payroll tax and the mandatory federal unemployment insurance tax. (The budget treats all unemployment taxes--both the federal tax and the additional state taxes--as federal revenues because they are paid into a federal trust fund.) Neither excise taxes nor total taxes include the windfall profit tax.

Figure 5.
Effective Federal Tax Rates by Population Decile (All taxes combined)



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.
The effective tax rate is the ratio of taxes to family income in each income class.

1988--although in 1988 tax rates remain less progressive than in 1977.2/

The federal tax system appears more progressive when the corporate income tax is allocated to capital income than when it is allocated to labor income. The top decile of the population pays about 60 percent of the corporate tax under the capital allocation but only about 30 percent under the labor allocation.

For most deciles the change in effective tax rates between 1977 and 1984 was relatively small. For families in the lowest-income decile, however, the total effective tax rate increased from 8.3 percent to 10.3 percent with the corporate tax allocated to capital income, and from 8.0 percent to 10.5 percent with the corporate tax allocated to

2. Two measures often used to summarize the progressivity of the tax system--the difference between the pretax and post-tax Gini coefficient and the Suits index--are described and shown in Appendix C.

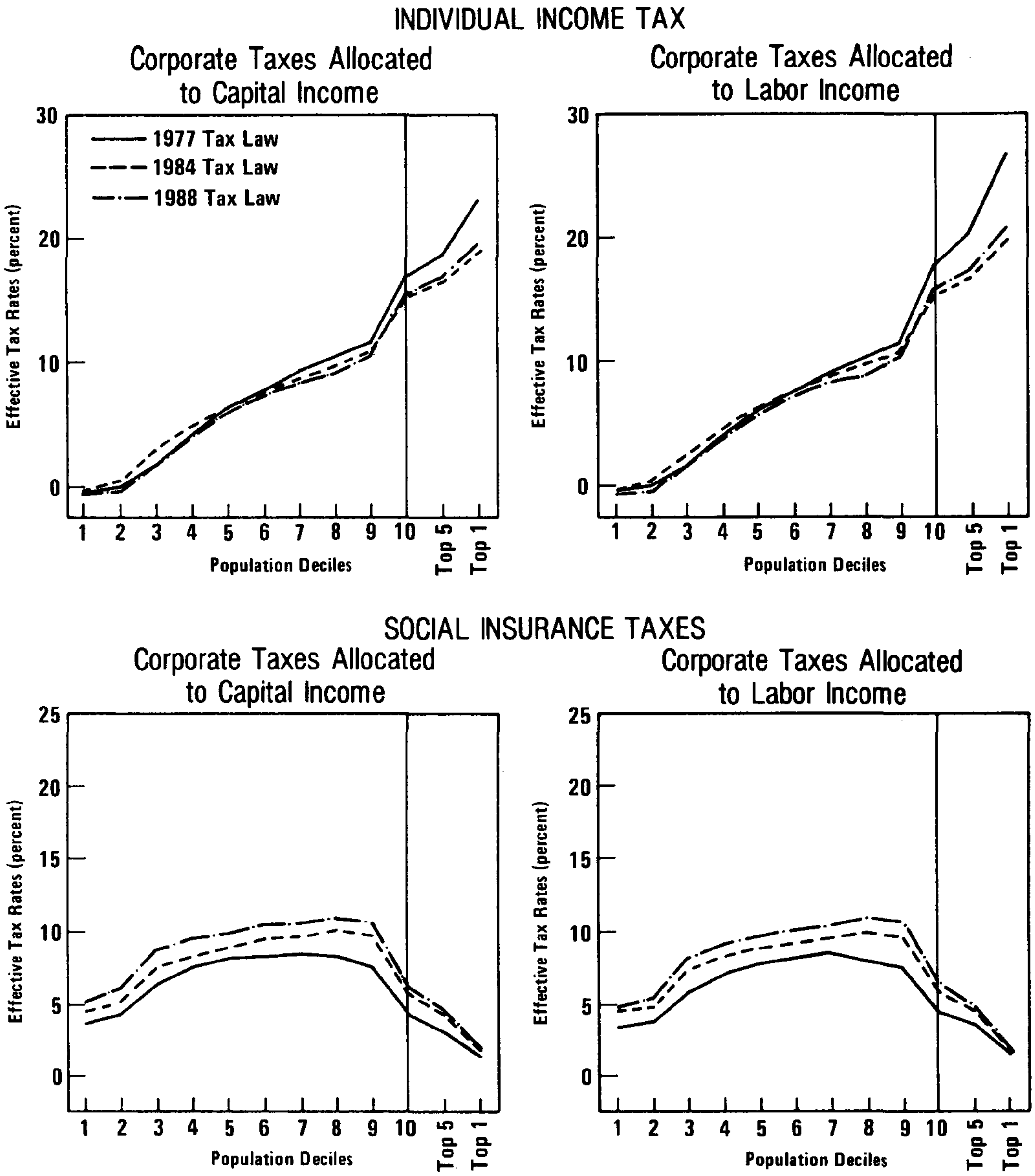
labor income. The effective tax rate for families in the highest-income decile declined dramatically between 1977 and 1984, from 29.5 percent to 24.8 percent for the capital income allocation of corporate taxes and from 26.7 percent to 23.6 percent for the labor income allocation. For the top 1 percent of families, the total effective tax rate declined from 39.2 percent in 1977 to 26.9 percent in 1984 with the corporate tax allocated to capital income, and from 30.9 percent to 23.1 percent with the corporate tax allocated to labor income.

By 1988, the effective tax rate for families in the lowest-income decile will decline slightly from its 1984 level, by 0.6 to 0.9 percentage points depending on the allocation of the corporate income tax, but will remain about 1.5 percentage points higher than in 1977. Between 1984 and 1988, the rate for families in the highest-income decile will increase by 1.4 to 1.8 percentage points depending upon the allocation of the corporate tax. The rate for the highest decile will remain two to three percentage points lower than it was in 1977.

Figure 6 illustrates effective tax rates for the individual income tax and for social insurance taxes under both allocations of the corporate tax. Because family income includes a family's share of the corporate income tax, these effective tax rates depend on the allocation of the corporate income tax. The differences are small enough, however, that for each tax the two distributions of effective tax rates look quite similar. Between 1977 and 1984, effective individual income tax rates rose for families in the bottom two-fifths of the income distribution and fell for families in the top two-fifths. The change in effective rates for the highest-income decile was the most dramatic, falling by 1.9 to 2.5 percentage points--about an 11 percent to 14 percent reduction in effective tax rates. Between 1984 and 1988, the effective individual income tax rate will fall for all income deciles except the highest. For every income group, the effective rate in 1988 will be the same as or lower than in 1977, with the largest drops for the higher-income groups. The lowest two deciles will have negative effective rates in 1988.

The effective tax rates for social insurance will rise between 1977 and 1988 for every group, reflecting the increase in the combined employer and employee Social Security tax rate from 11.70 percent to 15.02 percent. Between 1977 and 1984, effective tax rates increased faster for the higher-income groups because the maximum amount of earnings subject to tax rose nearly 40 percent faster than wages. The effective tax rate rises with income through the seventh decile in 1977

Figure 6.
Effective Federal Tax Rates by Population Decile



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

and through the eighth decile in the later years. The effective rate falls for families in the highest groups because they pay taxes on only part of their earnings, and because earnings are a smaller share of their income.

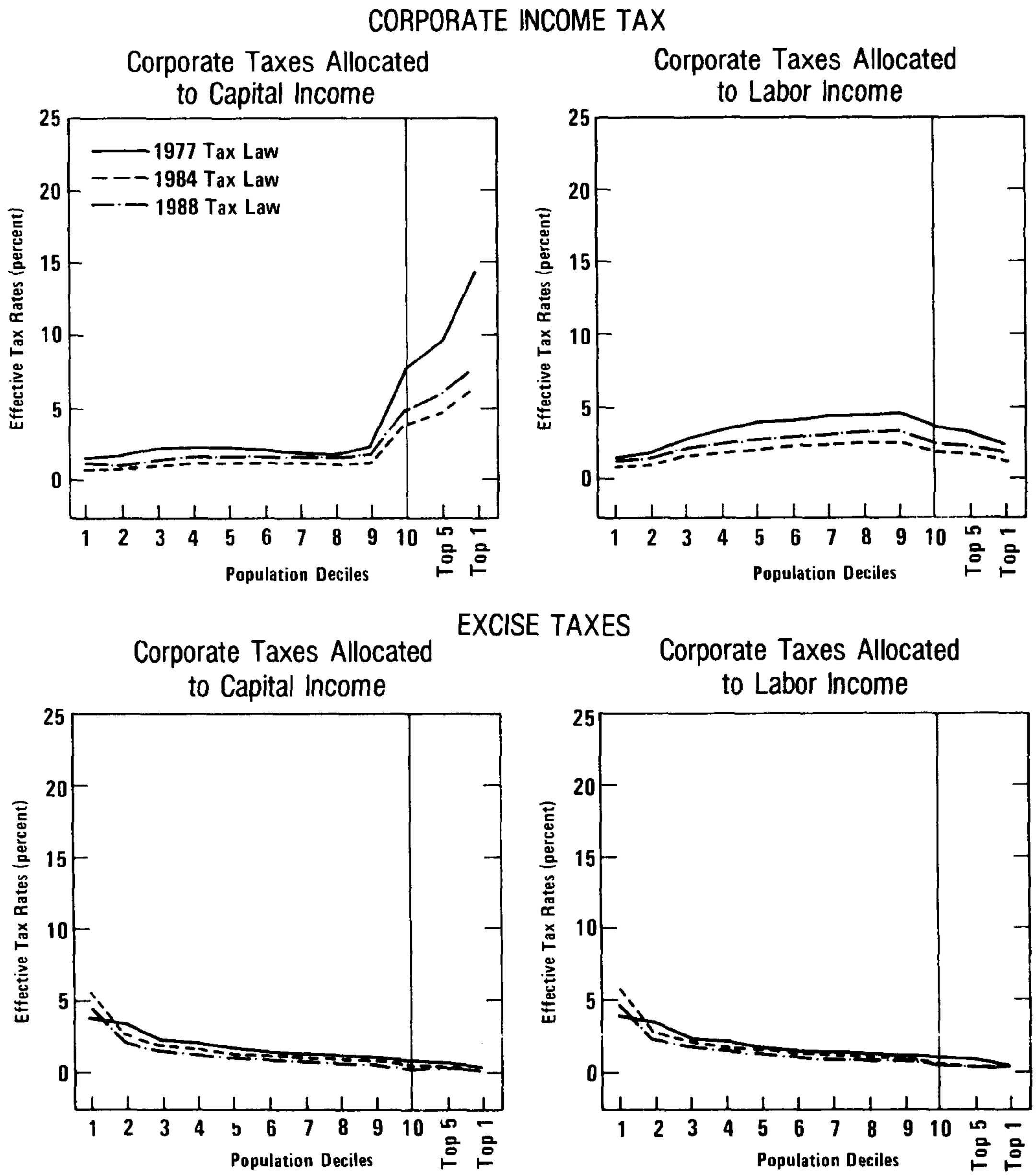
The effective social insurance tax rate is higher than the effective income tax rate for the lowest six income deciles in 1977, the lowest eight deciles in 1984, and all but the highest decile in 1988.

Figure 7 shows effective corporate income tax rates and effective excise tax rates under both allocations of the corporate income tax. The pattern of effective corporate tax rates in Figure 7 depends on the allocation of the tax. When the tax is allocated to capital income, the top income categories have much higher tax rates than the other nine deciles. The bottom deciles have somewhat lower rates than the middle ones. When the tax is allocated to labor income, the middle deciles have the highest effective corporate tax rates. Families in the top decile, especially those in the top 1 percent and 5 percent, have lower tax rates than average because labor income is a smaller share of their income than for the average family. The level of the corporate tax rate is almost 50 percent lower in 1984 than in 1977, and projected to be about 30 percent lower in 1988 than in 1977. As Table 3 showed, the 1984 rate reflects both a lower profit share of GNP and a lower tax rate on profits. The lower rate for 1988 primarily reflects a lower profit share.

The effective excise tax rate falls with income in all three years under either corporate tax allocation. For all groups except the lowest, the tax rate is lower in 1984 and 1988 than in 1977. The increase in the real value of the tax on gasoline and the drop in the real income of the bottom decile are responsible for the increase in the effective tax rate for the lowest-income families.

The complete set of estimated effective tax rates, for combined taxes and for each of the four major tax sources, is shown in Tables 7 and 8.

Figure 7.
Effective Federal Tax Rates by Population Decile



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

TABLE 7. EFFECTIVE FEDERAL TAX RATES, BY POPULATION DECILE: CORPORATE INCOME TAX ALLOCATED TO CAPITAL INCOME

Decile a/	Individual Income Tax	Social Insurance Taxes	Corporate Income Tax	Excise Taxes	All Taxes
			1977		
First b/	-0.5	3.6	1.5	3.7	8.3
Second	0.0	4.2	1.6	3.3	9.1
Third	1.8	6.2	2.2	2.1	12.3
Fourth	4.3	7.4	2.3	2.0	16.1
Fifth	6.3	8.0	2.3	1.6	18.2
Sixth	7.8	8.1	2.2	1.5	19.6
Seventh	9.2	8.4	1.9	1.3	20.9
Eighth	10.5	8.1	1.8	1.2	21.7
Ninth	11.7	7.5	2.3	1.1	22.6
Tenth	17.0	4.2	7.6	0.7	29.5
Top 5 percent	18.8	3.0	9.7	0.6	32.5
Top 1 percent	23.2	1.2	14.5	0.3	39.2
All Deciles c/	11.1	6.5	3.9	1.3	22.8
			1984		
First b/	-0.4	4.4	0.7	5.6	10.3
Second	0.3	5.0	0.8	2.6	8.7
Third	2.8	7.5	1.0	2.0	13.4
Fourth	4.8	8.3	1.3	1.7	16.1
Fifth	6.3	8.9	1.3	1.4	18.0
Sixth	7.8	9.4	1.3	1.2	19.6
Seventh	8.7	9.6	1.3	1.1	20.7
Eighth	9.7	10.0	1.2	1.0	22.0
Ninth	10.9	9.7	1.3	0.9	22.8
Tenth	15.1	5.6	3.7	0.5	24.8
Top 5 percent	16.3	4.1	4.6	0.4	25.4
Top 1 percent	18.8	1.7	6.2	0.2	26.9
All Deciles c/	10.6	8.0	2.1	1.0	21.7
			1988		
First b/	-0.8	5.0	1.1	4.5	9.7
Second	-0.4	5.9	1.0	2.1	8.6
Third	1.7	8.6	1.3	1.6	13.3
Fourth	4.1	9.4	1.6	1.4	16.5
Fifth	5.9	9.8	1.6	1.1	18.5
Sixth	7.2	10.4	1.6	1.0	20.2
Seventh	8.3	10.5	1.7	0.9	21.4
Eighth	9.0	10.9	1.6	0.8	22.3
Ninth	10.4	10.6	1.7	0.8	23.4
Tenth	15.5	6.0	4.7	0.4	26.6
Top 5 percent	16.9	4.4	5.7	0.4	27.4
Top 1 percent	19.7	1.8	7.7	0.2	29.3
All Deciles c/	10.4	8.7	2.7	0.9	22.7

SOURCE: Congressional Budget Office tax simulation models.

a. Ranked by size of family income.
b. Excludes families with zero or negative incomes.
c. Includes families with zero or negative incomes not shown separately.

TABLE 8. EFFECTIVE FEDERAL TAX RATES, BY POPULATION DECILE: CORPORATE INCOME TAX ALLOCATED TO LABOR INCOME

Decile a/	Individual Income Tax	Social Insurance Taxes	Corporate Income Tax	Excise Taxes	All Taxes
			1977		
First b/	-0.4	3.2	1.5	3.7	8.0
Second	-0.1	3.7	1.7	3.3	8.7
Third	1.5	5.7	2.7	2.1	12.0
Fourth	4.0	6.9	3.3	2.0	16.2
Fifth	6.1	7.7	3.8	1.5	19.1
Sixth	7.6	8.0	4.0	1.4	21.0
Seventh	9.0	8.3	4.4	1.3	23.0
Eighth	10.2	7.8	4.4	1.2	23.6
Ninth	11.5	7.4	4.5	1.1	24.5
Tenth	17.8	4.5	3.6	0.7	26.7
Top 5 percent	20.3	3.5	3.2	0.6	27.5
Top 1 percent	26.7	1.5	2.3	0.3	30.9
All Deciles c/	11.1	6.5	3.9	1.3	22.8
			1984		
First b/	-0.4	4.3	0.9	5.6	10.5
Second	0.2	4.7	1.0	2.6	8.5
Third	2.5	7.1	1.6	2.0	13.2
Fourth	4.7	8.1	1.8	1.6	16.3
Fifth	6.3	8.8	2.0	1.4	18.5
Sixth	7.6	9.1	2.2	1.2	20.1
Seventh	8.7	9.5	2.3	1.1	21.5
Eighth	9.7	9.9	2.4	1.0	23.0
Ninth	10.8	9.6	2.4	0.9	23.8
Tenth	15.3	5.8	1.9	0.5	23.6
Top 5 percent	16.8	4.4	1.7	0.4	23.3
Top 1 percent	19.8	1.8	1.3	0.2	23.1
All Deciles c/	10.6	8.0	2.1	1.0	21.7
			1988		
First b/	-0.8	4.7	1.2	4.5	9.6
Second	-0.5	5.3	1.4	2.1	8.3
Third	1.5	8.0	2.1	1.6	13.3
Fourth	4.0	9.0	2.4	1.4	16.8
Fifth	5.8	9.6	2.6	1.1	19.2
Sixth	7.1	10.0	2.8	1.0	20.9
Seventh	8.2	10.3	2.9	0.9	22.3
Eighth	8.9	10.8	3.1	0.8	23.6
Ninth	10.3	10.5	3.1	0.8	24.7
Tenth	15.8	6.3	2.5	0.5	25.0
Top 5 percent	17.5	4.8	2.3	0.4	24.9
Top 1 percent	20.9	1.9	1.9	0.3	24.9
All Deciles c/	10.4	8.7	2.7	0.9	22.7

SOURCE: Congressional Budget Office tax simulation models.

a. Ranked by size of family income.
b. Excludes families with zero or negative incomes.
c. Includes families with zero or negative incomes not shown separately.

CHAPTER VI

THE EFFECT OF TAX LAW CHANGES ON THE DISTRIBUTION OF FEDERAL TAXES

Changes in the distribution of taxes over years are not the result solely of changes in the tax law. The level and distribution of family income also change between years. The distribution of effective tax rates shifts between years for three reasons: changes in the tax law change the relationship between income and taxes; changes in the tax law cause families to alter their economic behavior, thereby changing the level and distribution of incomes; and incomes change for reasons independent of the tax law. Because it is difficult to distinguish accurately between changes in income caused by changes in the tax law and changes in income resulting from other causes, the full effect of changes in the law on the distribution of tax liabilities is not readily measurable. By holding constant the level and distribution of incomes, however, it is possible to isolate the effect of changes in the law on the relationship between income and taxes.

This section compares the distribution of taxes under 1977, 1984, and 1988 tax laws holding incomes constant at their 1984 and 1988 levels. The constant-income distributions of federal taxes show generally the same results as the previous distributions, but with less dramatic differences between 1977 and the other years for the highest-income decile. Effective tax rates for all but the highest-income decile are lower under 1977 law than under 1984 law, evaluated at either 1984 or 1988 incomes and with either allocation of the corporate income tax.

CONSTANT 1984 INCOME COMPARISONS

To make comparisons in terms of 1984 income, the 1977 and 1988 tax laws were income-indexed so that the effective tax rates in 1984 for 1977 and 1988 law would be the same as the effective rates in 1977 and 1988, except for changes in the distribution and composition of income. A family with exactly the average family income in 1984 would have the same effective tax rate for 1977 law indexed to 1984 as a family with average family income and the same composition of income in 1977. In the case of the individual income tax laws, this was done by inflating from 1977 (or deflating from 1988) all individual income tax parameters in the tax year, such as personal exemption amounts, standard deductions, and bracket boundaries, by the change in per family taxable personal income between 1984 and the tax year.1/ Equivalent Social Security tax laws were constructed by inflating (or deflating) the maximum taxable earnings amount by the change in per family wage and salary income between the tax year and 1984. Alternative corporate income taxes were determined by multiplying 1984 corporate profits by the ratio of taxes to profits in 1977 and 1988. Excise taxes were indexed by assuming that each family would pay taxes at the same effective rate as a family with the same relative income in 1977 or 1988.

The corporate income tax, excise taxes, and the employer portion of the Social Security payroll tax under adjusted 1977 and 1988 laws are not equal to the actual amount of those taxes in 1984. Because pretax family income includes the amount of these taxes and is held constant under all three laws in 1984, certain adjustments were made to reported family incomes. For example, adjusted 1977 corporate income taxes in 1984 were $85 billion compared with $59 billion of actual 1984 corporate income taxes. This difference in corporate income taxes implied that either capital or labor income paid to families would have been $26 billion lower in 1984, depending on the corporate income tax incidence assumption used, if the equivalent 1977 corporate income tax law had been in effect in 1984. Thus, under the first allocation of corporate income taxes, all capital incomes were reduced to make up the difference between actual 1984 corporate income taxes and adjusted 1977 taxes, while under the second allocation labor incomes were decreased. Individual income tax liabilities and, with the allocation to labor income, Social Security payroll tax liabilities, were reduced based on the decrease in income. A similar procedure was used to adjust for differences in the employer share of Social Security payroll taxes. Because the assumptions concerning the incidence of excise taxes used in this study imply that excise taxes have no effect on nominal family incomes, no adjustment was necessary for differences in excise taxes.

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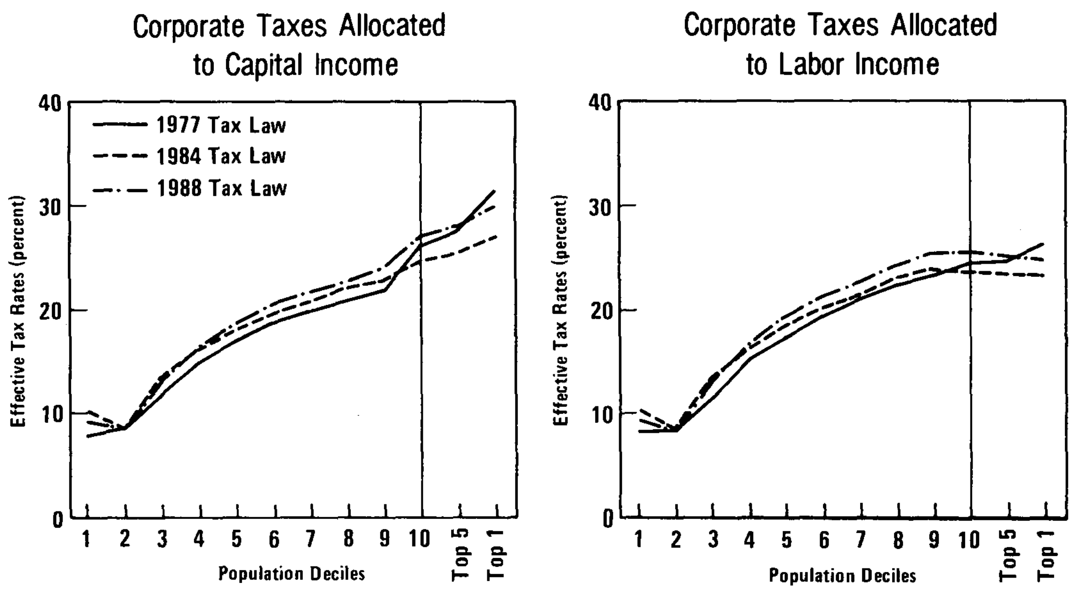
1. Taxable personal income is the sum of wages and salaries, of proprietors' income, and of personal rents, interest, and dividends.

Figure 8 compares total effective tax rates in 1984 under 1984 tax laws and under 1977 and 1988 tax laws adjusted to 1984. The greater progressivity of 1977 tax law in the high and the low end of the income distribution is still apparent, but for the highest decile the differences between 1977 law and 1984 and 1988 law are reduced. The corporate tax accounts for most of the differences between the effective tax rate for the highest decile in 1977 as compared with 1977 law in 1984. The 1977 corporate tax structure would generate relatively less revenue with the lower 1984 profit share. Although the effective tax rates are lowest under 1977 law for families in the second through ninth deciles, the rate at which effective tax rates increase between those deciles is about the same under all three tax laws.

Tables 9 and 10 show the complete distribution of total effective tax rates and effective tax rates for each type of tax in 1984 under the three different tax laws.

Figure 8.

Effective Federal Tax Rates by Population Decile, 1984, Under Tax Laws Adjusted to 1984 Incomes (All taxes combined)



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

TABLE 9. EFFECTIVE FEDERAL TAX RATES, BY POPULATION DECILE, WITH CONSTANT 1984 INCOMES: CORPORATE INCOME TAX ALLOCATED TO CAPITAL INCOME

Decile a/	Individual Income Tax	Social Insurance Taxes	Corporate Income Tax	Excise Taxes	All Taxes
		Income-Indexed 1977 Tax Law			
First b/	-0.6	3.8	1.0	3.7	7.9
Second	-0.5	4.3	1.1	3.5	8.4
Third	1.5	6.5	1.5	2.2	11.7
Fourth	3.9	7.1	1.8	2.1	14.9
Fifth	5.8	7.6	1.9	1.6	16.9
Sixth	7.4	8.1	1.8	1.5	18.8
Seventh	8.7	8.0	1.9	1.3	19.9
Eighth	10.2	7.8	1.7	1.2	20.9
Ninth	11.7	7.2	1.9	1.1	21.9
Tenth	16.4	3.9	5.3	0.6	26.2
Top 5 percent	17.8	2.8	6.5	0.5	27.6
Top 1 percent	21.1	1.1	8.9	0.2	31.3
All Deciles c/	11.0	6.2	3.0	1.2	21.5
		Actual 1984 Tax Law			
First b/	-0.4	4.4	0.7	5.6	10.3
Second	0.3	5.0	0.8	2.6	8.7
Third	2.8	7.5	1.0	2.0	13.4
Fourth	4.8	8.3	1.3	1.7	16.1
Fifth	6.3	8.9	1.3	1.4	18.0
Sixth	7.8	9.4	1.3	1.2	19.6
Seventh	8.7	9.6	1.3	1.1	20.7
Eighth	9.7	10.0	1.2	1.0	22.0
Ninth	10.9	9.7	1.3	0.9	22.8
Tenth	15.1	5.6	3.7	0.5	24.8
Top 5 percent	16.3	4.1	4.6	0.4	25.4
Top 1 percent	18.8	1.7	6.2	0.2	26.9
All Deciles c/	10.6	8.0	2.1	1.0	21.7
		Income-Indexed 1988 Tax Law			
First b/	-0.8	4.8	1.0	4.1	9.1
Second	-0.3	5.5	1.1	2.1	8.4
Third	1.8	8.2	1.5	1.6	13.1
Fourth	4.3	9.1	1.8	1.3	16.5
Fifth	5.9	9.8	1.8	1.1	18.6
Sixth	7.5	10.3	1.8	1.0	20.5
Seventh	8.5	10.4	1.9	0.9	21.7
Eighth	9.4	10.9	1.7	0.8	22.8
Ninth	10.9	10.6	1.8	0.8	24.0
Tenth	15.4	6.1	5.1	0.4	27.1
Top 5 percent	16.7	4.5	6.4	0.3	28.0
Top 1 percent	19.2	1.9	8.6	0.2	29.9
All Deciles c/	10.5	8.7	2.9	0.8	23.0

SOURCE: Congressional Budget Office tax simulation models.

a. Ranked by size of family income.

b. Excludes families with zero or negative incomes.

c. Includes families with zero or negative incomes not shown separately.

TABLE 10. EFFECTIVE FEDERAL TAX RATES, BY POPULATION DECILE, WITH CONSTANT 1984 INCOMES: CORPORATE INCOME TAX ALLOCATED TO LABOR INCOME

Decile a/	Individual Income Tax	Social Insurance Taxes	Corporate Income Tax	Excise Taxes	All Taxes
		Income-Indexed 1977 Tax Law			
First b/	-0.5	3.7	1.3	3.7	8.2
Second	-0.6	3.9	1.4	3.5	8.3
Third	1.2	6.0	2.2	2.2	11.6
Fourth	3.7	6.9	2.6	2.0	15.2
Fifth	5.6	7.4	2.9	1.6	17.5
Sixth	7.2	7.7	3.1	1.5	19.5
Seventh	8.5	7.9	3.3	1.3	21.0
Eighth	9.9	7.7	3.5	1.2	22.3
Ninth	11.4	7.1	3.5	1.1	23.1
Tenth	16.9	4.0	2.8	0.7	24.3
Top 5 percent	18.7	2.9	2.5	0.5	24.6
Top 1 percent	22.9	1.1	1.8	0.2	26.1
All Deciles c/	11.0	6.2	3.0	1.2	21.4
		Actual 1984 Tax Law			
First b/	-0.4	4.3	0.9	5.6	10.5
Second	0.2	4.7	1.0	2.6	8.5
Third	2.5	7.1	1.6	2.0	13.2
Fourth	4.7	8.1	1.8	1.6	16.3
Fifth	6.3	8.8	2.0	1.4	18.5
Sixth	7.6	9.1	2.2	1.2	20.1
Seventh	8.7	9.5	2.3	1.1	21.5
Eighth	9.7	9.9	2.4	1.0	23.0
Ninth	10.8	9.6	2.4	0.9	23.8
Tenth	15.3	5.8	1.9	0.5	23.6
Top 5 percent	16.8	4.4	1.7	0.4	23.3
Top 1 percent	19.8	1.8	1.3	0.2	23.1
All Deciles c/	10.6	8.0	2.1	1.0	21.7
		Income-Indexed 1988 Tax Law			
First b/	-0.8	4.7	1.3	4.1	9.3
Second	-0.3	5.0	1.4	2.1	8.2
Third	1.6	7.6	2.2	1.6	12.9
Fourth	4.1	8.8	2.5	1.3	16.8
Fifth	5.8	9.5	2.8	1.1	19.2
Sixth	7.4	9.9	3.0	1.0	21.2
Seventh	8.4	10.2	3.2	0.9	22.7
Eighth	9.2	10.7	3.4	0.8	24.1
Ninth	10.7	10.4	3.4	0.7	25.2
Tenth	15.8	6.3	2.7	0.4	25.3
Top 5 percent	17.5	4.8	2.4	0.4	25.0
Top a percent	20.7	2.0	1.8	0.2	24.7
All Deciles c/	10.5	8.6	2.9	0.8	22.9

SOURCE: Congressional Budget Office tax simulation models.

a. Ranked by size of family income.
b. Excludes families with zero or negative incomes.
c. Includes families with zero or negative incomes not shown separately.

CONSTANT 1988 INCOME COMPARISONS

While holding both the level and the distribution of income constant at a particular year's level helps to isolate the effects of different tax laws, the results still depend on incomes in that year. This may present a biased comparison if families adjust their incomes to take advantage of the tax law actually in effect in that year. For example, of all major types of income, realized capital gains appear to be the most immediately responsive to changes in the individual income tax law. In 1984, the maximum marginal tax rate on long-term capital gains was 20 percent. By 1988, the maximum tax rate will be 28 percent (33 percent over some ranges of income). Realized capital gains, which were $139 billion in 1984, would probably have been much lower if the equivalent 1988 tax law had been in effect. Because the share of capital gains in the upper part of the income distribution is greater than the overall share of income, equivalent 1988 law in 1984 overstates both income and taxes paid by the higher-income deciles compared to what they would have been if equivalent 1988 law actually had been in effect in 1984.

The same problem exists for other types of income to the extent that families adjust their receipt of such income in response to particular tax laws. In an attempt to control for these problems, the distribution of taxes by population decile was also estimated under equivalent 1977 and 1984 tax laws at the 1988 level and distribution of family income. The procedures were the same as with the equivalent tax law estimates for 1984.

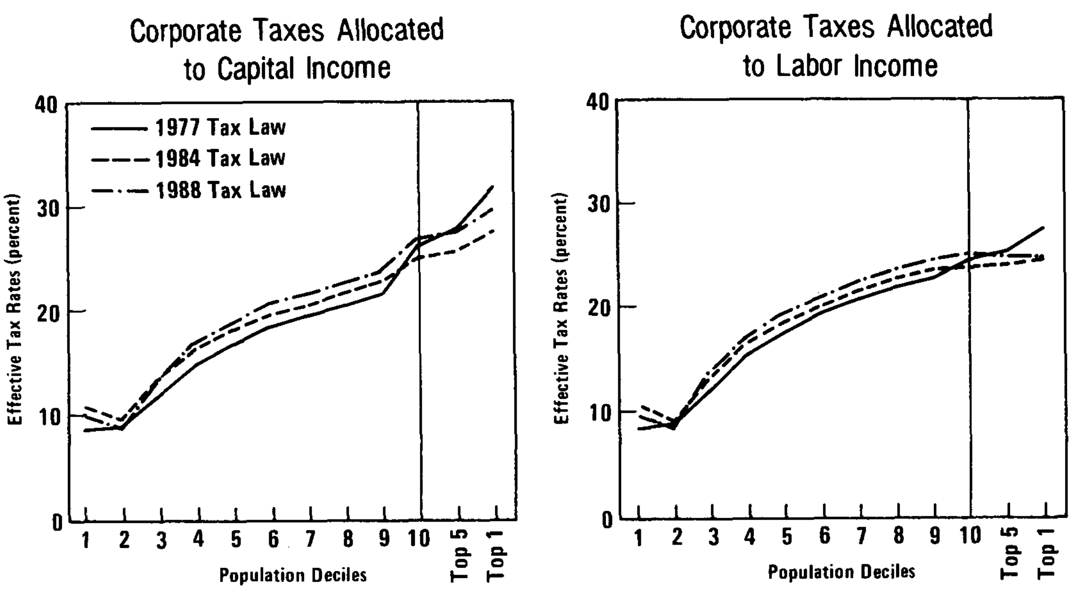
Figure 9 compares total effective tax rates in 1988 under 1988 tax laws and under 1977 and 1984 tax laws adjusted to 1988. The results for constant 1988 incomes are quite similar to those for 1984 because the distributions of income are similar. Even though realized capital gains are forecast to be smaller in 1988 than they would have been without tax reform, the drop in realizations resulting from tax reform is offset by the recent rapid growth in gains attributable to stock market growth and other factors, leaving realizations similar as a share of income in 1984 and 1988.

Figure 10 shows effective tax rates under the three different tax laws in 1988 for individual income and Social Security payroll taxes. The results in Figure 10 are quite similar to the results in Figure 6, which showed effective individual income and Social Security payroll tax rates in different years. For both 1977 and 1984 tax laws, the change in effective tax rates as incomes increase is about the same whether the laws are evaluated at current incomes or at 1988 incomes. The levels of effective tax rates for 1977 and 1984 tax laws are different, however, if the laws are evaluated at 1988 incomes rather than at current incomes.

Effective individual income tax rates for income-indexed 1977 tax law are somewhat lower than the effective rates under actual 1977 law. For families in the first through ninth deciles, incomes grew less than the overall average growth in income between 1977 and 1988. Because income-indexed 1977 tax law was adjusted to the average growth in income between 1977 and 1988, effective tax rates for families in the lower nine deciles are less under 1977 income-indexed law than under 1977 tax law. For families in the top decile, capital gains make up a larger percentage of income in 1988 than in 1977. Because 50 percent of capital gains are excluded from taxable income under 1977 law, the higher capital gains share results in slightly lower effective tax rates for families in the top decile under income-indexed 1977 law than under actual 1977 law.

Figure 9.

Effective Federal Tax Rates by Population Decile, 1988, Under Tax Laws Adjusted to 1988 Incomes (All taxes combined)



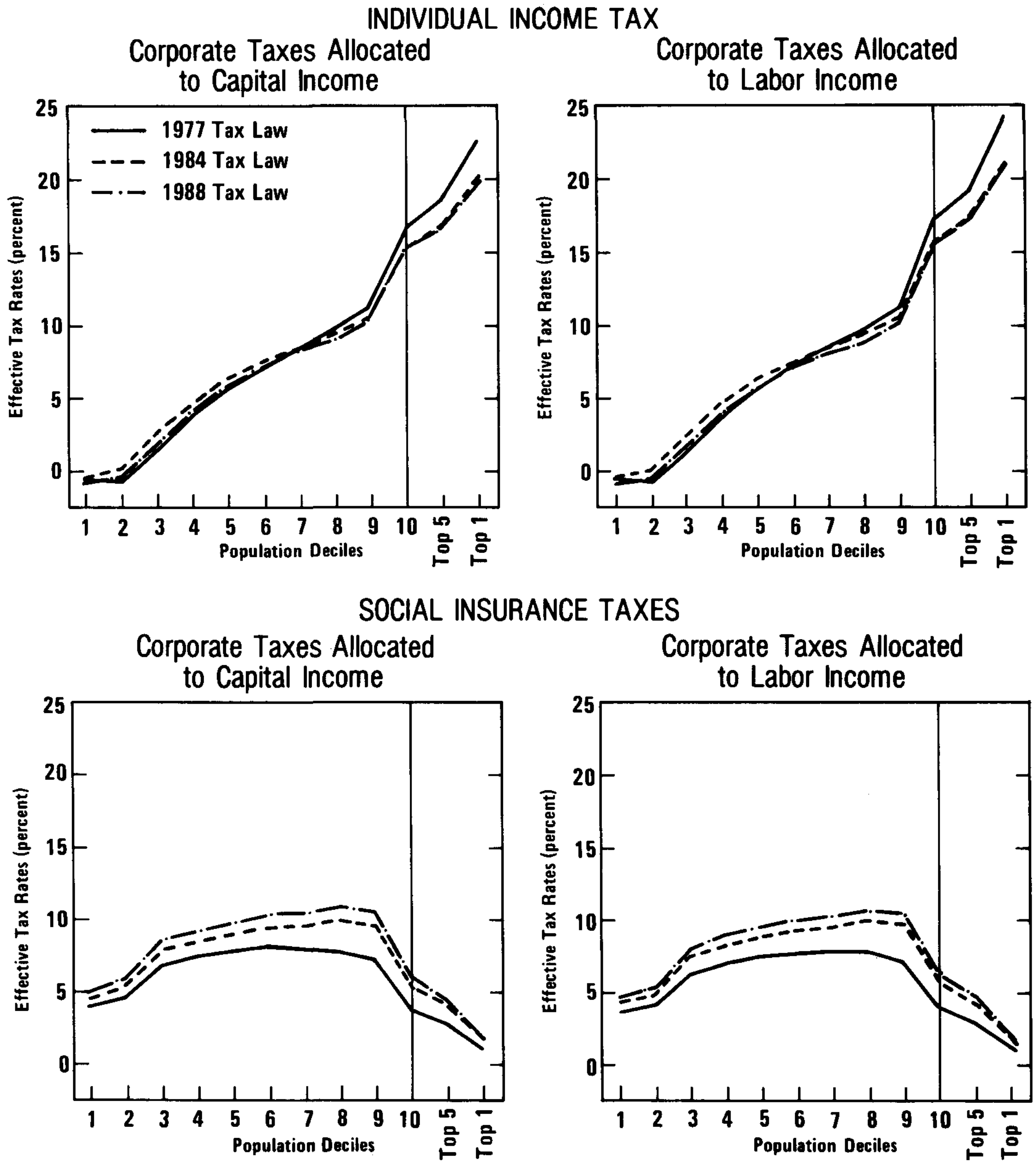
SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

Figure 10.

Effective Federal Tax Rates by Population Decile, 1988, Under Tax Laws Adjusted to 1988 Incomes



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

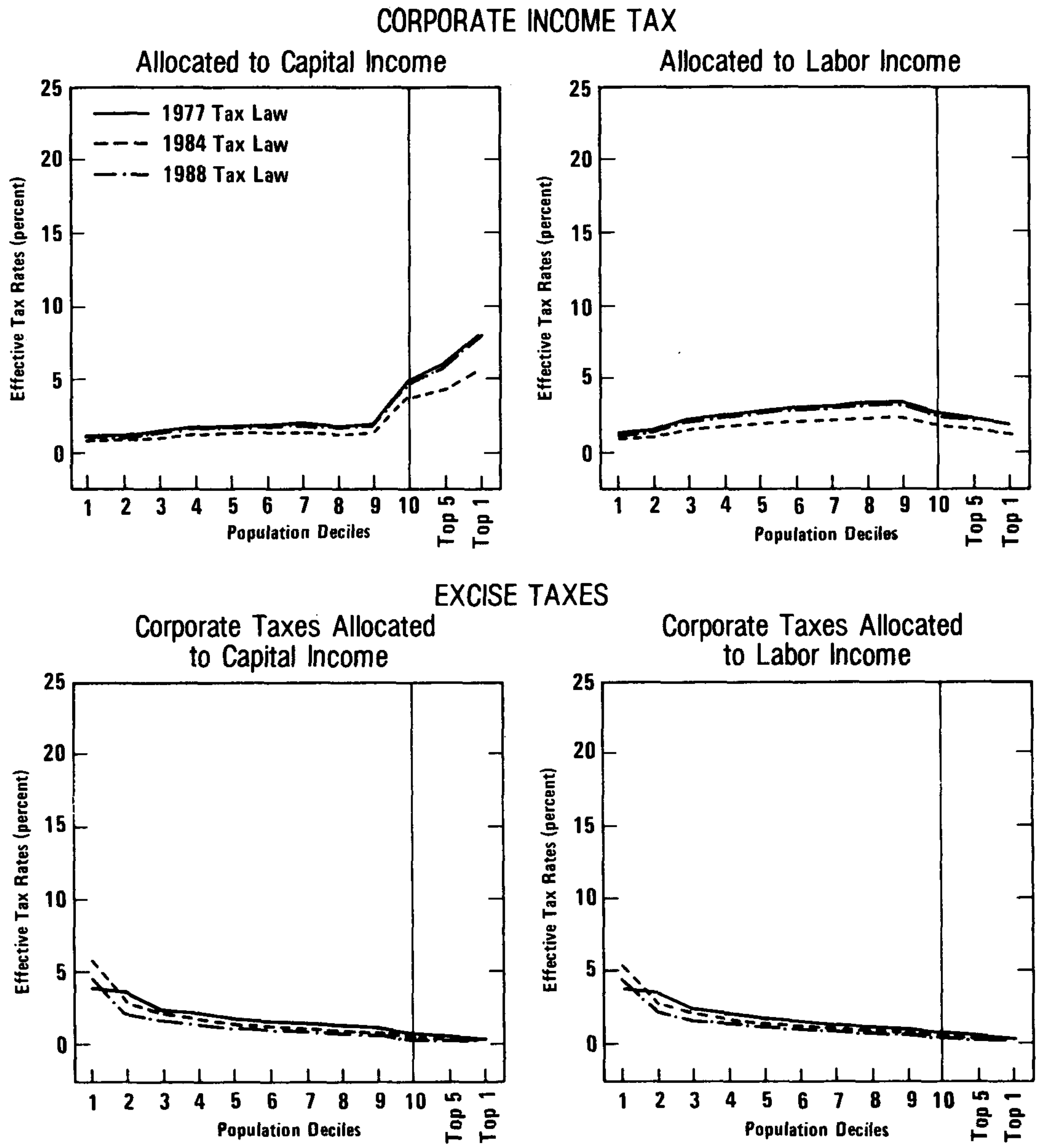
Lower-income families show slightly higher effective social insurance tax rates under income-indexed 1977 law than under actual 1977 law, reflecting a larger percentage of income from wages for these families in 1988 than in 1977. A reduction in the percentage of income from wages for higher-income families explains the small reduction in effective social insurance tax rates for families in the upper-two fifths of the income distribution.

Figure 11 shows effective corporate income and excise tax rates under the three different tax laws in 1988. The results in Figure 11 for corporate income taxes are quite different from the results in Figure 7, which showed effective corporate income taxes in different years. Figure 7 showed much higher effective corporate income tax rates in 1977 than in 1988. Figure 11 shows almost the same effective corporate income tax rates under income-indexed 1977 and 1988 tax laws when the corporate profits share of GNP is held constant at 1988 levels. The higher effective corporate income tax rates in 1977 compared with 1988 as shown in Figure 7 are thus almost entirely the result of a higher corporate profits share in 1977 rather than of differences in the corporate income tax law.

Tables 11 and 12 show the distribution of effective tax rates for each type of tax in 1988 under the three different tax laws. It is important to remember that these results do not show the effect of the 1986 tax reform. Income-indexed 1984 tax law is not the law that would have been in effect if the 1986 act had not become law. In that case, the individual income tax schedule for 1988 would have been the 1984 schedule indexed for increases in consumer prices between 1984 and 1988. Because incomes are expected to grow faster than prices between 1984 and 1988, effective individual income tax rates under that law would be higher than those shown for income-indexed 1984 law in Tables 11 and 12.

Figure 11.

Effective Federal Tax Rates by Population Decile, 1988, Under Tax Laws Adjusted to 1988 Incomes



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.